

Date: Friday, 20/07/2007 9:07:28 AM
 User: Linda Lacelle

Process Sheet

Customer	: CC-DAR01 Dart Aerospace Ltd.	Drawing Name	: GPS GIMBLE MOUNT
Job Number	: 00053		
Estimate Number	: 10062		
P.O. Number	: <i>N/A</i>	Part Number	: ENGINEERING
This Issue	: 20/07/2007	Drawing Number	: P604-654
Prsht Rev.	: NC	Project Number	: IA0001
First Issue	: <i>N/A</i>	Drawing Revision	: <i>N/A</i>
Previous Run	: 00052	Material	: <i>N/A</i>
Written By	:	Due Date	: 31/12/2006
Checked & Approved By	:	Qty:	1 Um: Each
Comment	: Project #:P604-654 Project Description:gps gimble mount		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	ENGINEERING 1	ENGINEERING RESOURCE #1
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Comment: ENGINEERING RESOURCE #1

Project Evaluation:

Involved:Marketing,Sales,Eng & Manegment

Comments:

- Install D412-758-013 in 205 mockup as per Install
 Instructions *VB 07-07-20*
 - Install D412-758-011 in 205 mockup as per Install
 Instructions *VB 07-07-20*
 - Assemble D3514-041 per ~~prototype~~ prototype drawing
 D3514 Rev.A dated 07.06.18 *VB 07-07-20*
 Assemble D3514-043 per prototype drawing
 D3514 Rev.A dated 07.06.18 *VB 07-07-20*

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Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: GPS GIMBLE MOUNT

Job Number: 00053

Part Number: ENGINEERING

Job Number:



Seq. #:

Machine Or Operation:

Description :

ENG APPROVAL

CB 07.07.20

QCS1.

12.07.07.20

2.0

ENGINEERING 1

ENGINEERING RESOURCE #1



Comment: ENGINEERING RESOURCE #1

Input Review:

Involved: Sales, Eng & Manufacturing Eng

Comments:

CB

3.0

MFG ENGINEERING

MFG ENGINEERING



Comment: MFG ENGINEERING

Create Initial Estimate :

Involved: Manegment & Mfg Engineering

Comments:

CB

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Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: GPS GIMBLE MOUNT

Job Number: 00053

Part Number: ENGINEERING

Job Number:



Seq. #:

Machine Or Operation:

Description :

4.0

ENGINEERING 1

ENGINEERING RESOURCE #1



Comment: ENGINEERING RESOURCE #1

Preliminary Design Review

Involved: Marketing/Sales, Mfg Engineering, Engineering & Management

Comments:

CB

5.0

00053A

INITIAL PROTOTYPE TEMPLATE



Comment: Sub-Component INITIAL PROTOTYPE TEMPLATE

6.0

ENGINEERING 1

ENGINEERING RESOURCE #1



Comment: ENGINEERING RESOURCE #1

Final Design Review:

Involved: Marketing/Sales, Mfg Engineering & Management

Comments:

Date: Friday, 20/07/2007 9:07:28 AM

User: Linda Lacelle

Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: GPS GIMBLE MOUNT

Job Number: 00053

Part Number: ENGINEERING

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

ENGINEERING 1

ENGINEERING RESOURCE #1



Comment: ENGINEERING RESOURCE #1

Final Dwg's:

Involved: Engineering

Comments:

-
-
-
-

CB

8.0

MFG ENGINEERING

MFG ENGINEERING



Comment: MFG ENGINEERING

Create Final Estimates:

Comments:

-
-
-
-
-

9.0

ENGINEERING 1

ENGINEERING RESOURCE #1



Comment: ENGINEERING RESOURCE #1

Paperwork Certification:

Involved: Engineering

Comments:

-
-
-

Date: Friday, 20/07/2007 9:07:28 AM

User: Linda Lacelle

Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: GPS GIMBLE MOUNT

Job Number: 00053

Part Number: ENGINEERING

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

MFG ENGINEERING

MFG ENGINEERING



Comment: MFG ENGINEERING

1-Create NC programs if Applicable

2-Create Tooling if Applicable

3-Link 1st W/O ('s) to Project W/O FOR 1ST Production Unit

CB

11.0

OUTSIDE SERVICE

OUTSIDE SERVICES

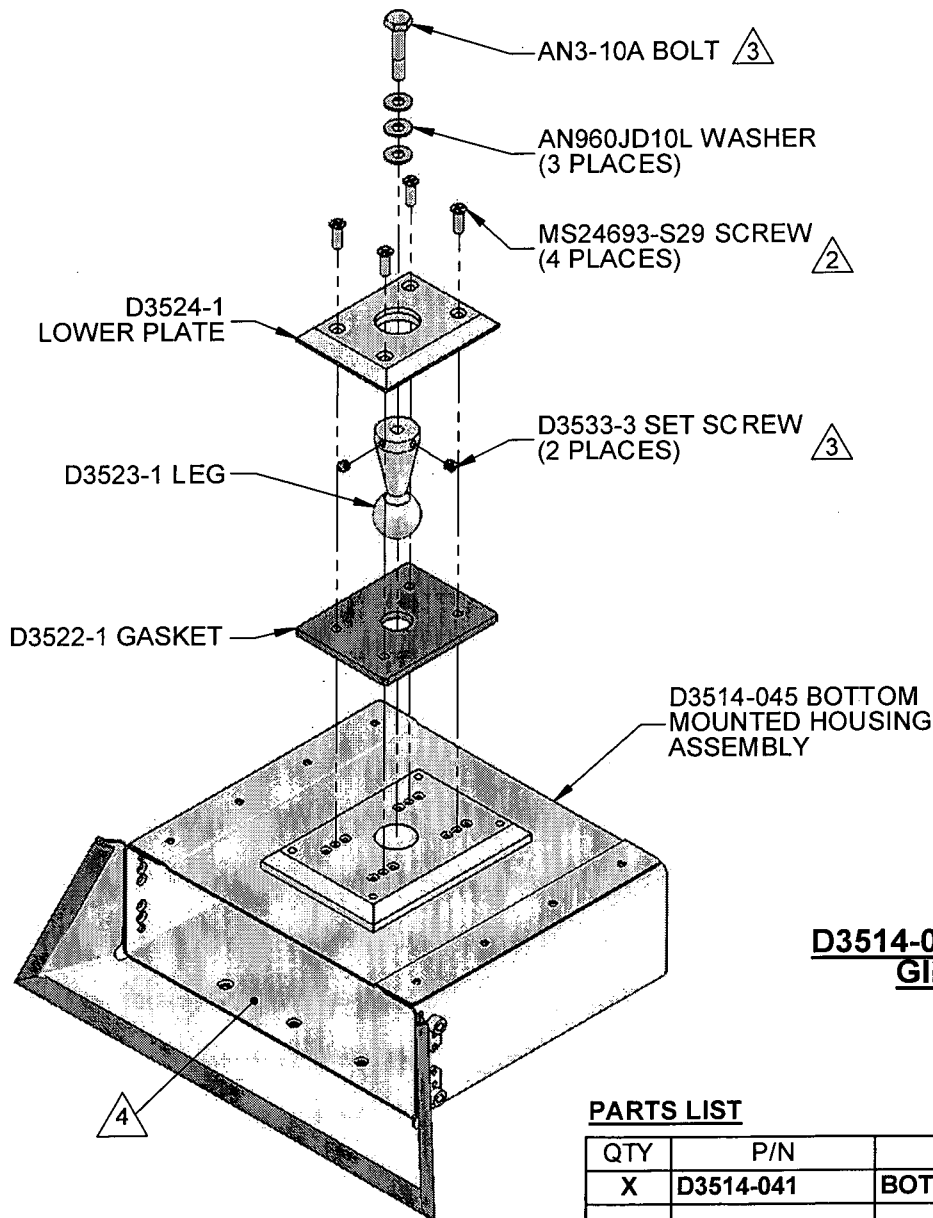


Comment: Sub-Contracting OUTSIDE SERVICES(If Applicable)

Job Completion



DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED [Signature]	DRAWING NO. D3514	REV. A SHEET 1 OF 9
DATE 07.06.18	TITLE GPS RECEIVER HOUSING		SCALE 1:3
REV A	DATE 07.06.18	DESCRIPTION NEW ISSUE	



REFERENCE ONLY

D3514-041 BOTTOM MOUNTED GIMBAL ASSEMBLY

PARTS LIST

QTY	P/N	DESCRIPTION
X	D3514-041	BOTTOM MOUNTED GIMBAL ASSEMBLY
1	D3514-045	BOTTOM MOUNTED HOUSING ASSEMBLY
1	D3522-1	GASKET
1	D3523-1	LEG
1	D3524-1	LOWER PLATE
2	D3533-3	SET SCREW
1	AN3-10A	BOLT
3	AN960JD10L	WASHER
4	MS24693-S29	SCREW

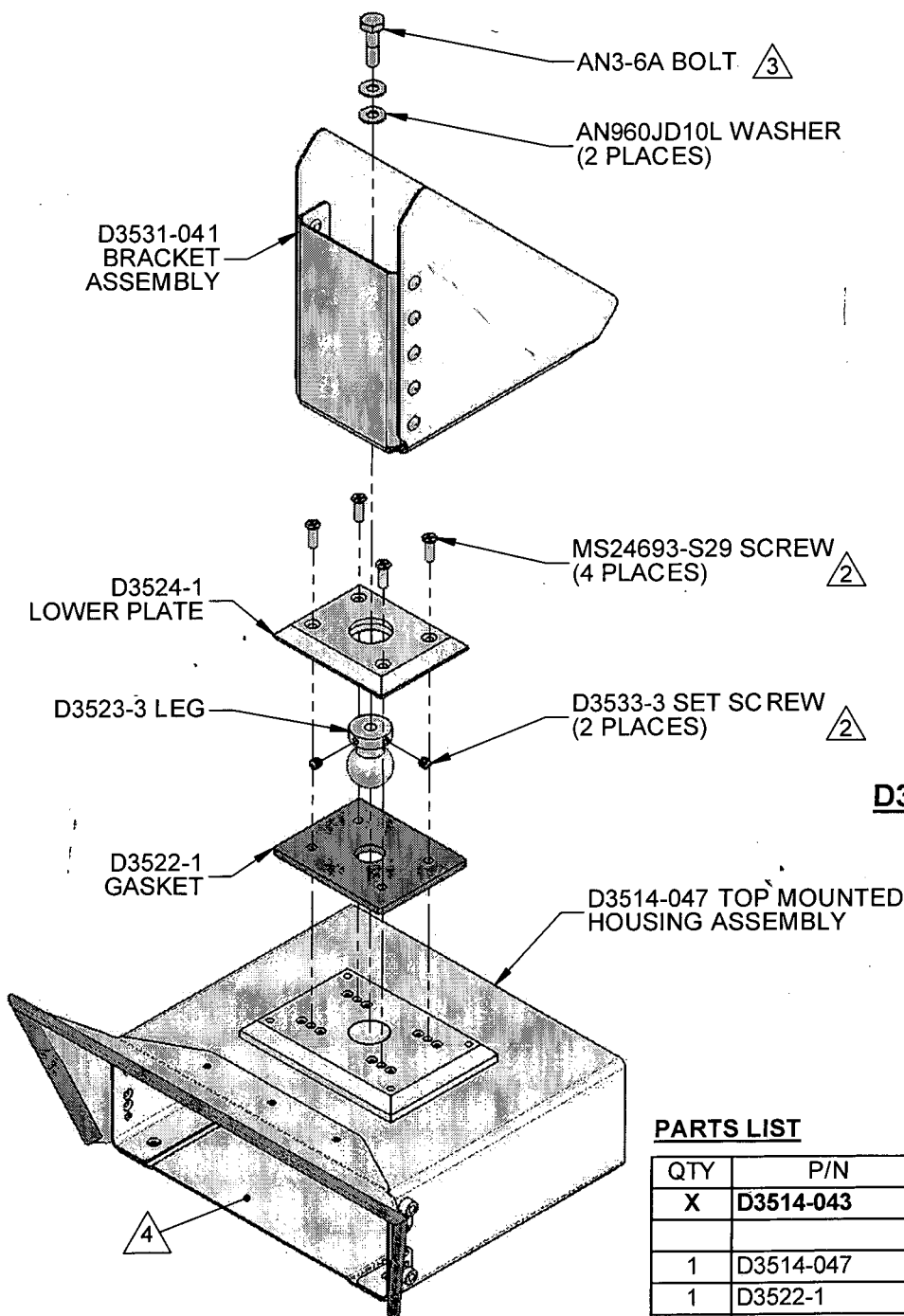
NOTE:

- 1) ASSEMBLE PER DART QSI 003
- 2) TORQUE SCREWS TO 5-6 in-lbs
- 3) TIGHTEN TO SNUG FIT ONLY
- 4) IDENTIFY WITH DART P/N "D3514-041" USING A WHITE MARKER ON THE INSIDE OF THE HOUSING ASSEMBLY WHERE INDICATED

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DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D3514	REV. A SHEET 2 OF 9
DATE 07.06.18		TITLE GPS RECEIVER HOUSING	SCALE 1:3



REFERENCE ONLY

D3514-043 TOP MOUNTED GIMBAL ASSEMBLY

PARTS LIST

QTY	P/N	DESCRIPTION
X	D3514-043	TOP MOUNTED GIMBAL ASSEMBLY
1	D3514-047	TOP MOUNTED HOUSING ASSEMBLY
1	D3522-1	GASKET
1	D3523-3	LEG
1	D3524-1	LOWER PLATE
1	D3531-041	BRACKET ASSEMBLY
2	D3533-3	SET SCREW
1	AN3-6A	BOLT
2	AN960JD10L	WASHER
4	MS24693-S29	SCREW

NOTE:

- 1) ASSEMBLE PER DART QSI 003
- 2) TORQUE SCREWS TO 5-6 in-lbs
- 3) TORQUE BOLTS TO 15-25 in-lbs
- 4) IDENTIFY WITH DART P/N "D3514-043" USING A WHITE MARKER ON THE INSIDE OF THE HOUSING ASSEMBLY WHERE INDICATED

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REFERENCE ONLY

INSTALLATION INSTRUCTIONS

IIN-D412-758

GPS Receiver Gimbal Mount

BELL 204 / 205 / 212 / 214 / 412 MODELS

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: _____
D. SHEPHERD (DE # 02)

DATE: 07.06.20
CERT. NO.: SH03-14
ISSUE NO.: 2

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Revision: **A**
Date: 07.06.20

Revision Record

Revision	Issue Date	Description
A	07.06.20	New Issue

REFERENCE ONLY

1.0 INTRODUCTION

These instructions cover the installation of Dart GPS Receiver Gimbal Mount for the Bell 204/205/212/214/412 series aircraft. These kits provide either a glare shield gimbal mount or hanging gimbal mount for a GPS unit with maximum dimensions of 2.00" x 6.25" x 5.80" (50.8mm x 158.8mm x 147.3mm) and a maximum weight of 5.0 lbs (2.3kg).

The Dart **D412-758-011** Bottom Mounted GPS Receiver Gimbal Mount (see **Figure 1.1**) installs on the glare shield of the helicopter instrument panel. The kit contains the Bottom Mounted Gimbal Assembly as well as a Base Plate, Mounting Plate, Support Arm, Placard, Doubler and hardware.

The Dart **D412-758-013** Top Mounted GPS Receiver Gimbal Mount (see **Figure 1.2**) installs on the windshield centre post of the helicopter. This kit contains the Top Mounted Gimbal Assembly as well as a Placard, Doubler and hardware.

REFERENCE ONLY

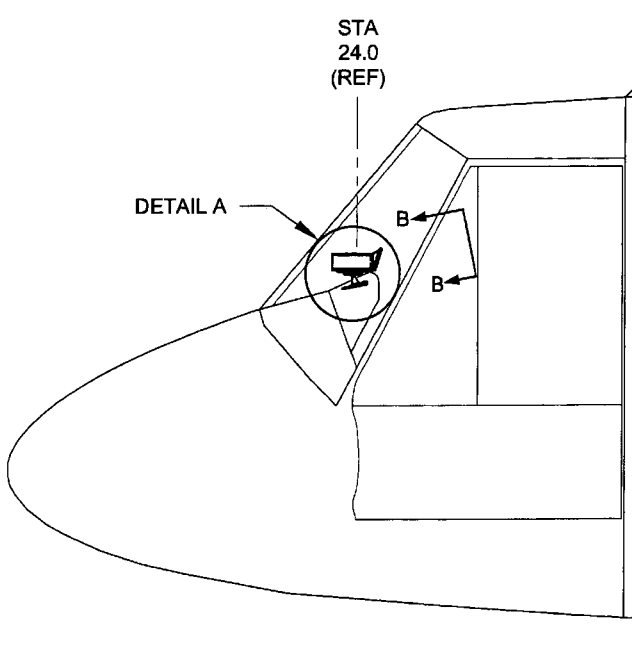


Figure 1.1 – D412-758-011 Bottom Mounted GPS Gimbal Mount

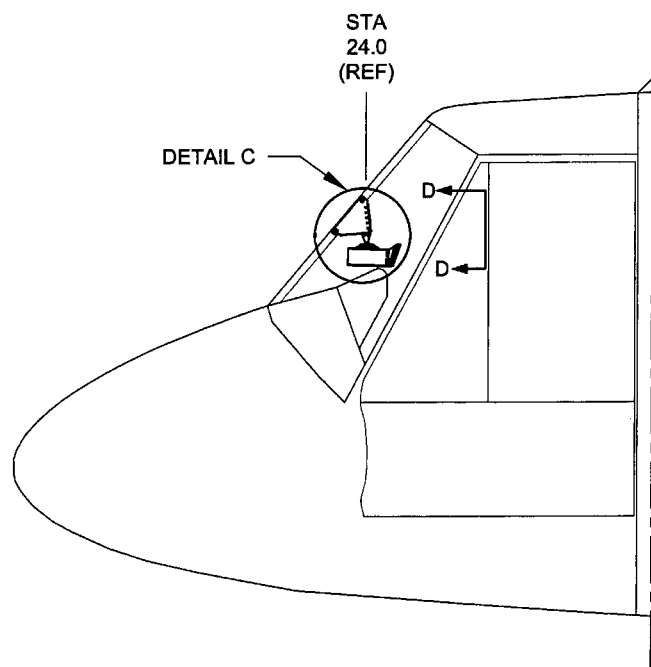


Figure 1.2 – D412-758-013 Top Mounted GPS Gimbal Mount

The components in the Dart kits are as defined in the table in Section 5.0 of these instructions. For convenience, only the last three digits of the part number are listed on the top row of each table. The quantity of each component which is included in the D412-758-011 Bottom Mounted GPS Gimbal Mount, for example, is as defined in the column labeled -011.

2.0 GENERAL NOTES

COMPATIBILITY

Compatibility of this installation with the aircraft is the **responsibility of the installer**. Ensure that this installation does not conflict with a previous modification.

WORKMANSHIP

Unless otherwise stated, all workmanship should be to the standards set by the Aircraft Maintenance Manual.

CONTINUING AIRWORTHINESS

These installations should be maintained in accordance with the Instruction for Continued Airworthiness ICA-D412-758.

3.0 INSTALLATION PROCEDURE

Follow Section 3.2 for installing the D412-758-011 Bottom Mounted GPS Receiver Gimbal Mount.

Follow Section 3.3 for installing the D412-758-013 Top Mounted GPS Receiver Gimbal Mount.

REFERENCE ONLY**3.1 Notes**

- 3.1.1 It is acceptable to use longer or shorter bolts or screws in order to ensure 1.5-4 threads in safety for all fasteners.
- 3.1.2 AN3 bolts and AN525-10R7 and MS27039-1-09 screws should be torqued to 15-25 in-lbs (1.7-2.8 N-m). AN526-632R7 and MS24693-S27/-S29 screws and D3533-3 Set Screws should be torqued to 5-6 in-lbs (0.6-0.7 N-m).
- 3.1.3 Remove all burrs and sharp edges. All holes should be de-burred and touched up with zinc chromate primer after drilling.
- 3.1.4 All bare aluminum should be chemical conversion coated, primed and painted in accordance with the Aircraft Maintenance Manual.
- 3.1.5 Install rivets in accordance with AC43-13-1B Chapter 4 Section 4. Minimum edge distance on installed rivets must not be less than 0.31" (7.9 mm).

3.2 Installation of the Dart D412-758-011 Bottom Mounted GPS Gimbal Mount

- 3.2.1 Locate the D3530-1 Base Plate on top of the glare shield of the helicopter instrument panel as shown in **Figure 3.2.1** so that the centre hole of the D3530-1 Base Plate is at LBL 8.0 +/-1.0. Ensure that the base plate lies flat on the glare shield.

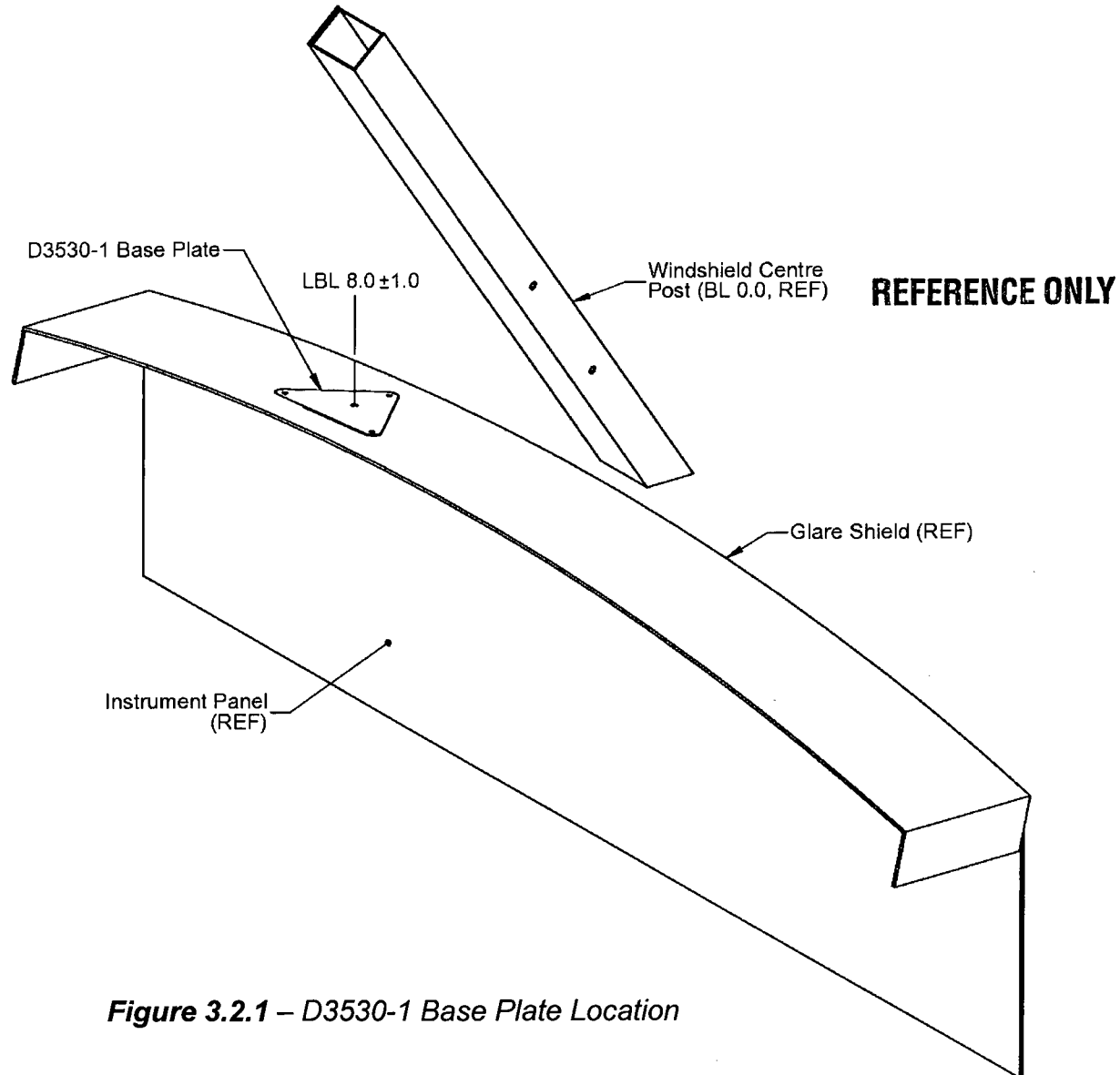


Figure 3.2.1 – D3530-1 Base Plate Location

- 3.2.2 Locate the D3530-3 Mounting Plate underneath the glare shield aligning the holes in the mounting plate with the holes in the D3530-1 Base Plate. Locate the D3527-1 Support Arm underneath the glare shield with one hole aligning with the larger #9 ($\varnothing 0.196"$) hole of the D3530-3 Mounting Plate and the other hole against the instrument panel as shown in **Figure 3.2.2**. Ensure that the mounting plate or support arm does not interfere with any instruments on the instrument panel.

Note: The D3530-3 Mounting Plate may need to be bent to conform to the curvature of the glare shield.

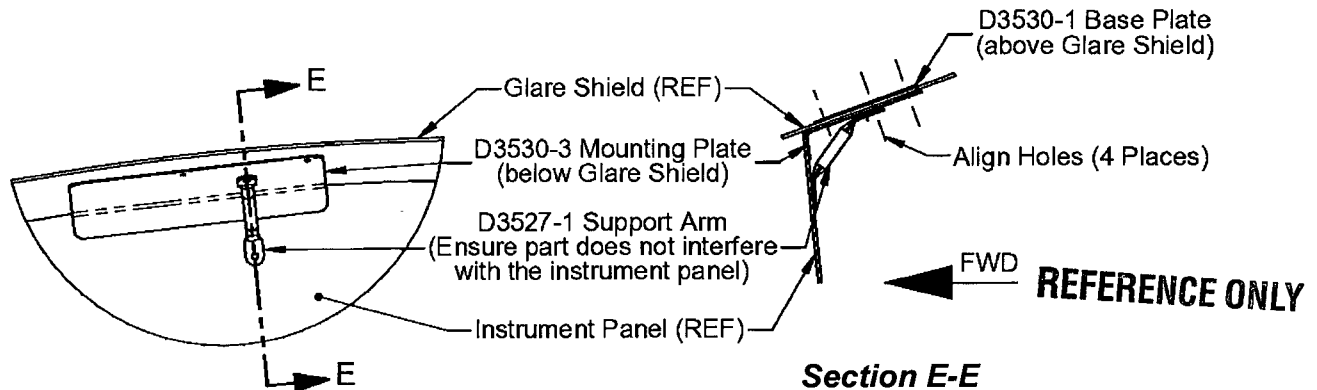


Figure 3.2.2 – D3530-1, D3530-3 and D3527-1 Alignment
(View B-B from Figure 1.1)

- 3.2.3 Remove any screws in the instrument panel which will be covered by the D3530-3 Mounting Plate. Remove the D3530-3 Mounting Plate and D3527-1 Support Arm.
- 3.2.4 Transfer drill qty(3) #27 ($\varnothing 0.144"$) holes and qty(1) #9 ($\varnothing 0.196"$) hole from the D3530-1 Base Plate through the glare shield. Deburr and touch up the holes per the Aircraft Maintenance Manual.
- 3.2.5 Re-locate the D3530-3 Mounting Plate under the glare shield, aligning the holes in the mounting plate with the holes transfer drilled in the previous step. Transfer drill any holes from the instrument panel that are covered by the D3530-3 Mounting Plate through the mounting plate. Deburr and touch up holes per the Aircraft Maintenance Manual.

- 3.2.6 Install the D3530-1 Base Plate and D3530-3 Mounting Plate on the helicopter glare shield with qty(3) AN526-632R7 screws, qty(3) AN960JD6 washers and qty(3) MS21042L06 nuts, as shown in **Figure 3.2.3**. Replace any of the screws that were removed from the instrument panel in step 3.2.3 through the D3530-3 Mounting Plate. Torque the screws to 5-6 in-lbs (0.6-0.7 N-m).

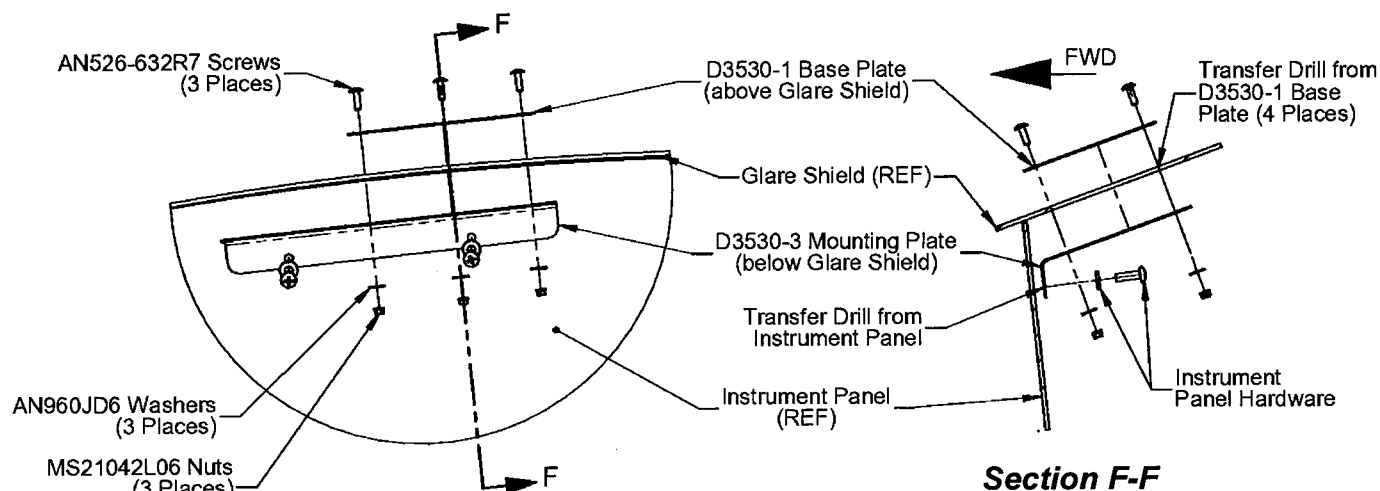


Figure 3.2.3 – D3530-1 Base Plate and D3530-3 Mounting Plate Installation
(View B-B from Figure 1.1)

- 3.2.7 Remove the AN3-10A bolt and washers from the D3514-041 Bottom Mounted Gimbal Assembly. Install the D3514-041 Bottom Mounted Gimbal Assembly as shown in **Figure 3.2.4**. Torque the AN3-10A bolt to 15-25 in-lbs (1.7-2.8 N-m). Torque the D3533-3 Set Screws to 5-6 in-lbs (0.6-0.7 N-m).

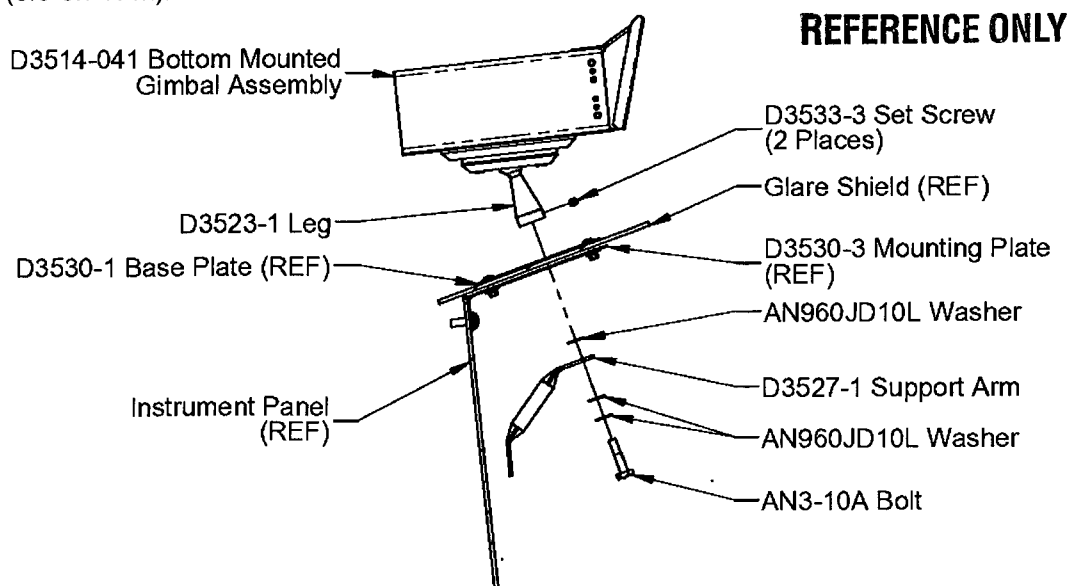


Figure 3.2.4 – Installation of the D3514-041 Bottom Mounted Gimbal Assembly on the Glare Shield
(Detail A from Figure 1.1)

REFERENCE ONLY

- 3.2.8 Transfer drill qty(1) #9 (\varnothing 0.196") hole from the D3527-1 Support Arm through the helicopter instrument panel. Deburr and touch up the hole per the Aircraft Maintenance Manual. Secure the D3527-1 Support Arm to the instrument panel using the MS27039-1-09 screw, qty(2) AN960JD10 washers and the MS21042L3 nut as shown in **Figure 3.2.5**. Torque the screw to 15-25 in-lbs (1.7-2.8 N-m).

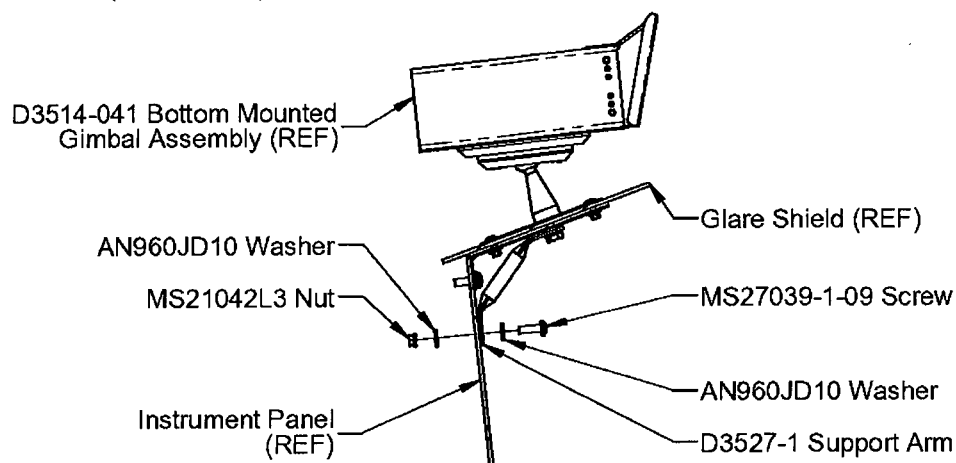


Figure 3.2.5 – Installation of the D3527-1 Support Arm
(Detail A from Figure 1.1)

REFERENCE ONLY

- 3.2.9 Place the D3525-1 Placard on the instrument panel in clear view of the pilot.

Note: The Gimbal Mount can be secured in the desired orientation by tightening the qty(4) MS24693-S29 screws found on the D3514-041 Bottom Mounted Gimbal Assembly as shown in **Figure 3.2.6**.

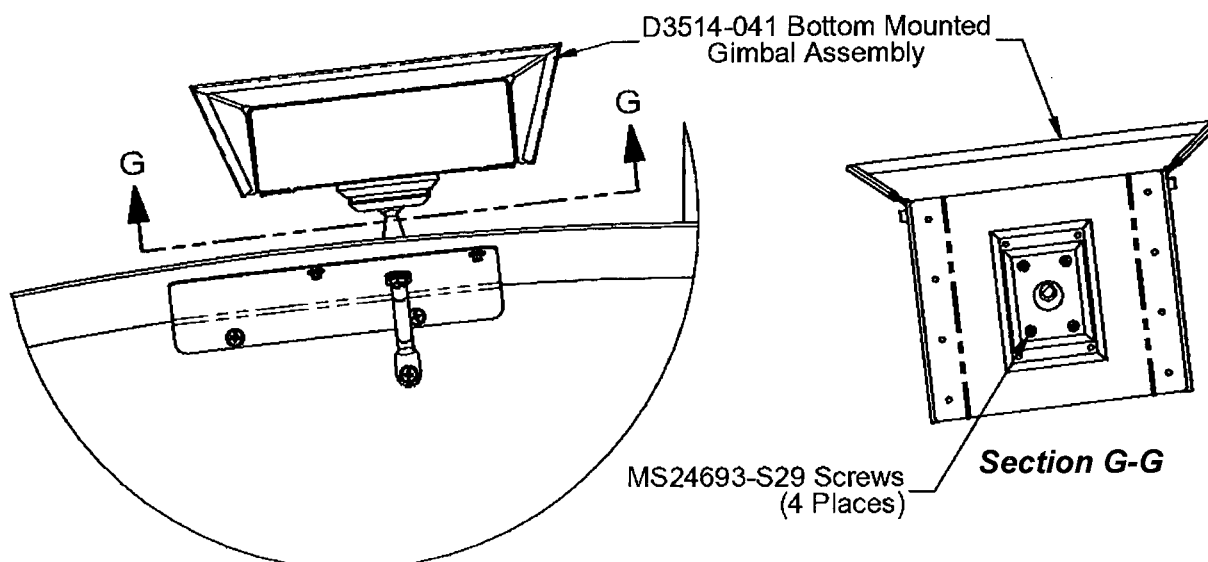


Figure 3.2.6 – Loosen Screws to Adjust Position of Receiver Housing
(View B-B from Figure 1.1)

- 3.2.10 Install the GPS unit (not included in this kit). Install the GPS Mounting Box into the D3514-045 Bottom Mounted Housing Assembly using the qty(4) MS24693-S27 screws and the nutplates mounted on the D3514-045 Housing Assembly as shown in **Figure 3.2.7**.

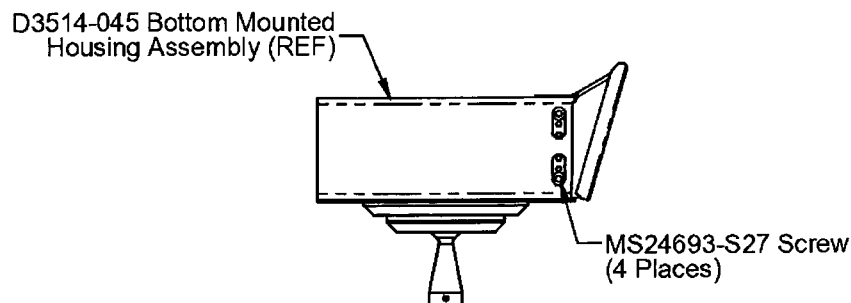


Figure 3.2.7 – Screws for Mounting GPS Unit
(Detail A from Figure 1.1)

- 3.2.11 Install the antenna per Section 3.4 of these instructions.

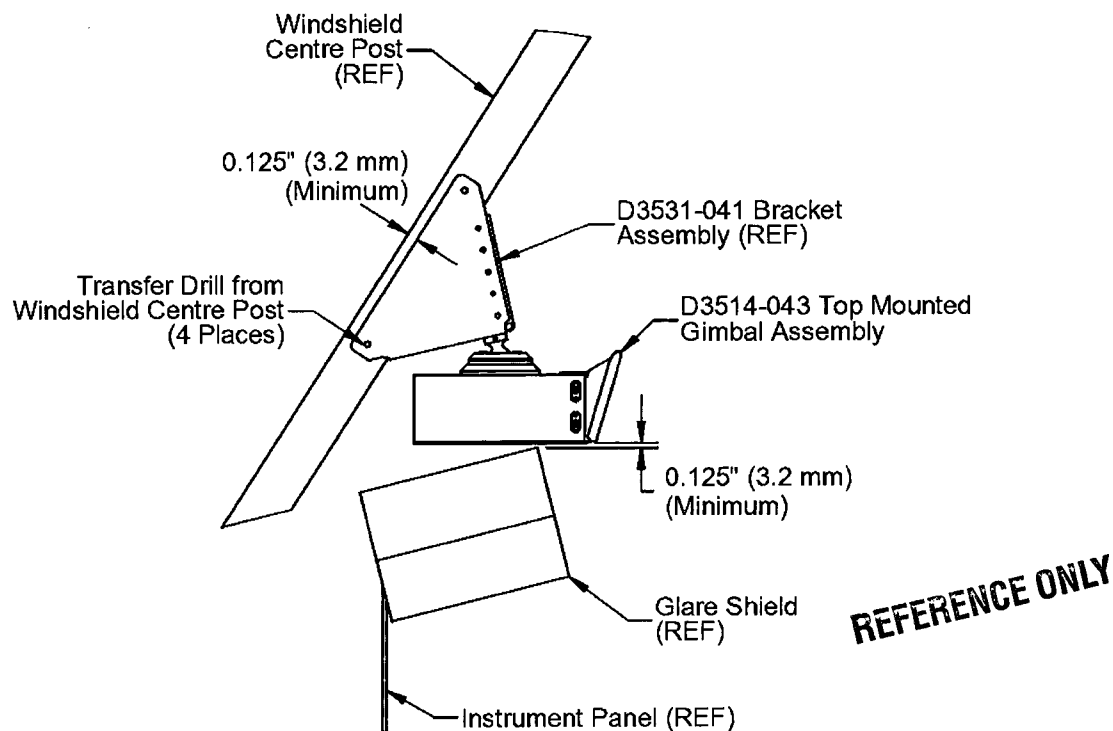
REFERENCE ONLY

- 3.2.12 Install the wiring per Section 3.5 of these instructions.

3.3 Installation of the Dart D412-758-013 Top Mounted GPS Gimbal Mount

- 3.3.1 Remove the cover from the windshield centre post in accordance with the Aircraft Maintenance Manual and temporarily move any obstructing wires, so that they will not interfere with hole drilling operations.
- 3.3.2 Locate the D3514-043 Top Mounted Gimbal Assembly into position on the centre post of the front windshield as shown in **Figure 3.3.1** so that at least qty(4) holes from existing nutplates in the windshield centre post are covered by the D3531-041 Bracket Assembly. Install the D3514-043 Top Mounted Gimbal Assembly as low as possible as shown in **Figure 3.3.1**, ensuring there is a minimum hole-edge distance of 0.25" (6.4 mm) and a minimum clearance to the glare shield and window of 0.125" (3.2 mm). Transfer drill qty(4) #11 (Ø 0.191") holes through the D3531-041 Bracket Assembly from the centre post. Deburr and touch up holes per the Aircraft Maintenance Manual.

Note: If only one set of holes are available to install the D3531-041 Bracket Assembly, another set of qty(2) #11 (Ø 0.191") holes may be drilled through the bracket assembly, centre post and centre post cover. Qty(2) MS21069L4K nutplates (not included in this kit) can then be installed on the inside of the centre post using qty(4) MS20426AD3-4 rivets (not included in this kit). Deburr and touch up holes per the Aircraft Maintenance Manual.



**Figure 3.3.1 – Figure Shows the Position Restrictions of the Installation
(Detail C from Figure 1.2)**

- 3.3.3 Align the qty(2) D2464-0066 Neoprene Seals flush with the edges of the D3531-041 Bracket Assembly as shown in **Figure 3.3.2**. Transfer punch the qty(4) #11 ($\varnothing 0.191$ ") holes drilled in the D3531-041 Bracket Assembly through the D2464-0066 Neoprene Seal. Remove the adhesive backing from the neoprene part and apply the neoprene to the D3531-041 Bracket Assembly as shown in **Figure 3.3.2**.

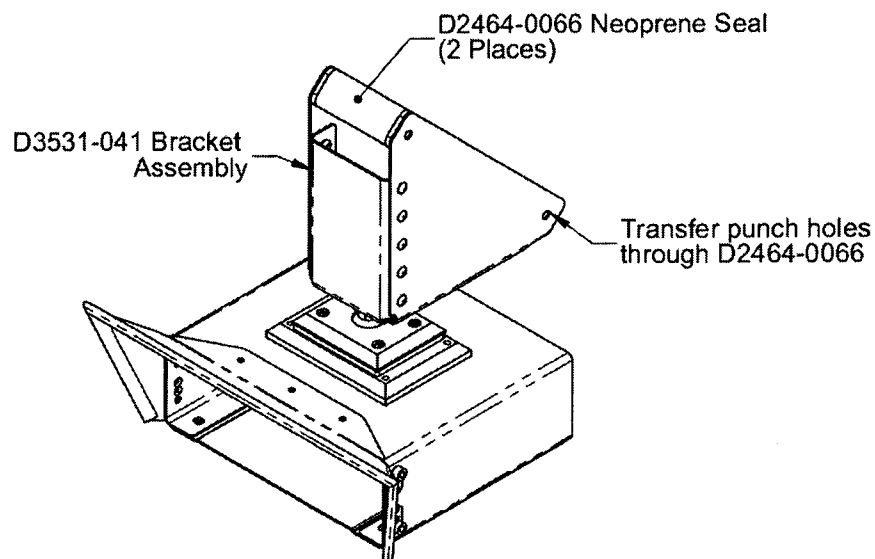


Figure 3.3.2 – D2464-0066 Neoprene Seal Installation

- 3.3.4 Re-install the windshield centre post cover in accordance with the Aircraft Maintenance Manual.
- 3.3.5 Install the D3514-043 Top Mounted Gimbal Assembly on the windshield centre post using qty(4) AN525-10R7 screws, qty(4) AN960JD10 washers and qty(4) D3645-1 Washers as shown in **Figure 3.3.3**. Pick up on the existing nutplates mounted on the inside of the windshield centre post. Torque the bolts to 15-25 in-lbs (1.7-2.8 Nm).

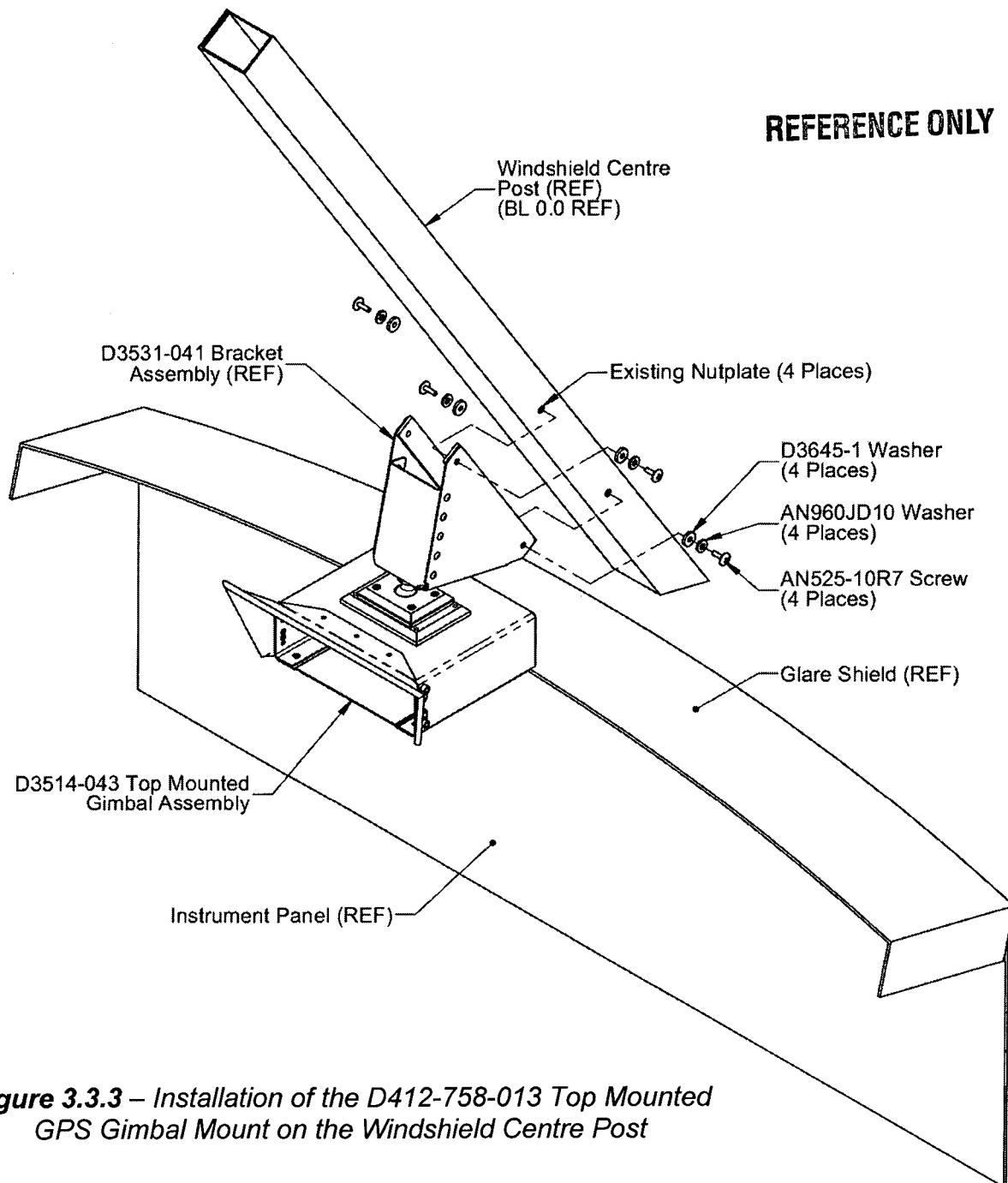


Figure 3.3.3 – Installation of the D412-758-013 Top Mounted GPS Gimbal Mount on the Windshield Centre Post

3.3.6 Install the D3525-1 Placard on the helicopter instrument panel in clear view of pilot.

Note: The Gimbal Mount can be secured in the desired orientation by tightening the qty(4) MS24693-S29 screws found on the D3514-043 Top Mounted Gimbal Assembly as shown in **Figure 3.3.4**

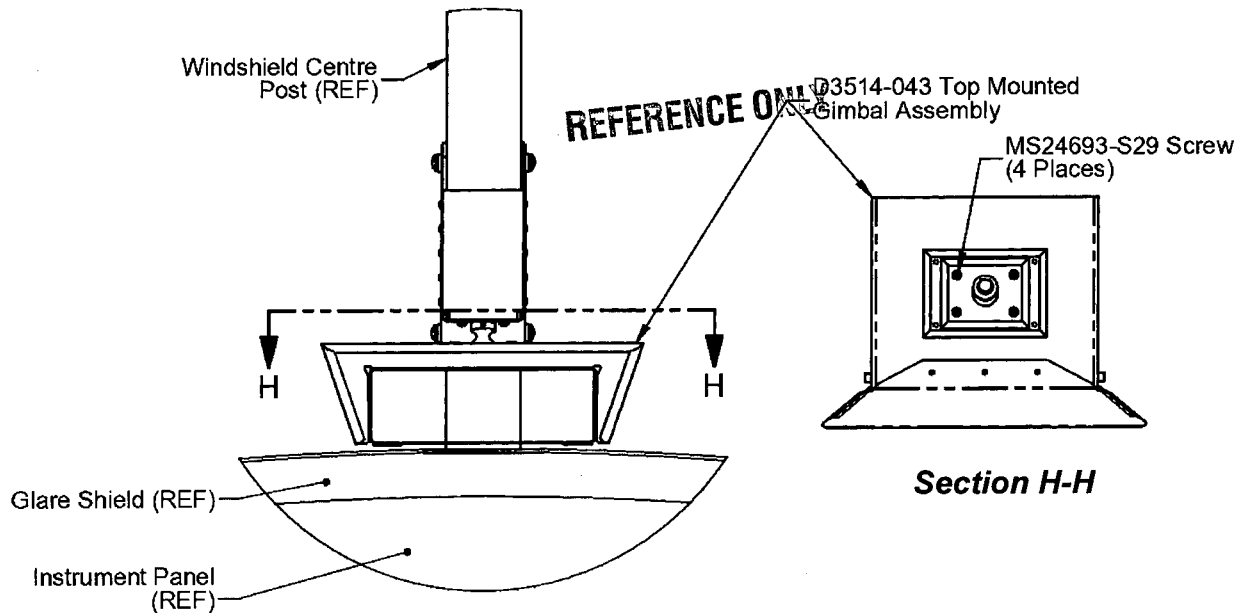


Figure 3.3.4 – Loosen Screws to Adjust Position of Receiver Housing
(View D-D from Figure 1.2)

3.3.7 Install the GPS unit (not included in this kit). Install the GPS Mounting Box into the D3514-047 Top Mounted Housing Assembly using the qty (4) MS24693-S27 screws and the nutplates mounted on the D3514-047 Housing Assembly as shown in **Figure 3.3.5**.

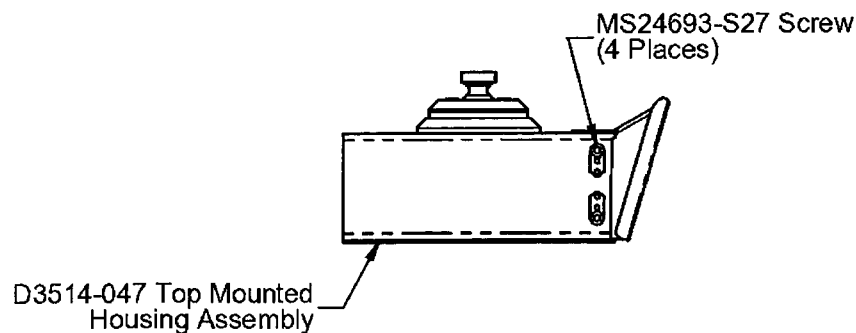


Figure 3.3.5 – Screws for Mounting GPS Unit
(Detail A from Figure 1.2)

3.3.8 Install the antenna per Section 3.4 of these instructions.

3.3.9 Install the wiring per Section 3.5 of these instructions.

3.4 Antenna Installation

Note: Install the antenna in conjunction with the instructions provided with the GPS unit.

- 3.4.1 Position the centre of the D3534-1 Doubler at the location shown in **Figure 3.4.1** on the interior roof of the cockpit (Left Butt Line 10.5 and STA Line 51.5). Remove any rivets from the helicopter that will be covered by the doubler. Test fit the GPS antenna (provided with GPS unit; not included in this kit) at the location shown in **Figure 3.4.1** on the exterior roof of the helicopter. Transfer drill qty(1) \varnothing 0.59" and qty(4) #9 (\varnothing 0.196") holes from the antenna through the helicopter skin and the D3534-1 Doubler. Deburr and touch up holes per the Aircraft Maintenance Manual.

Note: The D3534-1 Doubler may have to be bent to conform to the curvature of the aircraft.

Note: The size and location of the \varnothing 0.59" and \varnothing 0.196" holes may vary depending on the antenna provided in the GPS kit.

REFERENCE ONLY

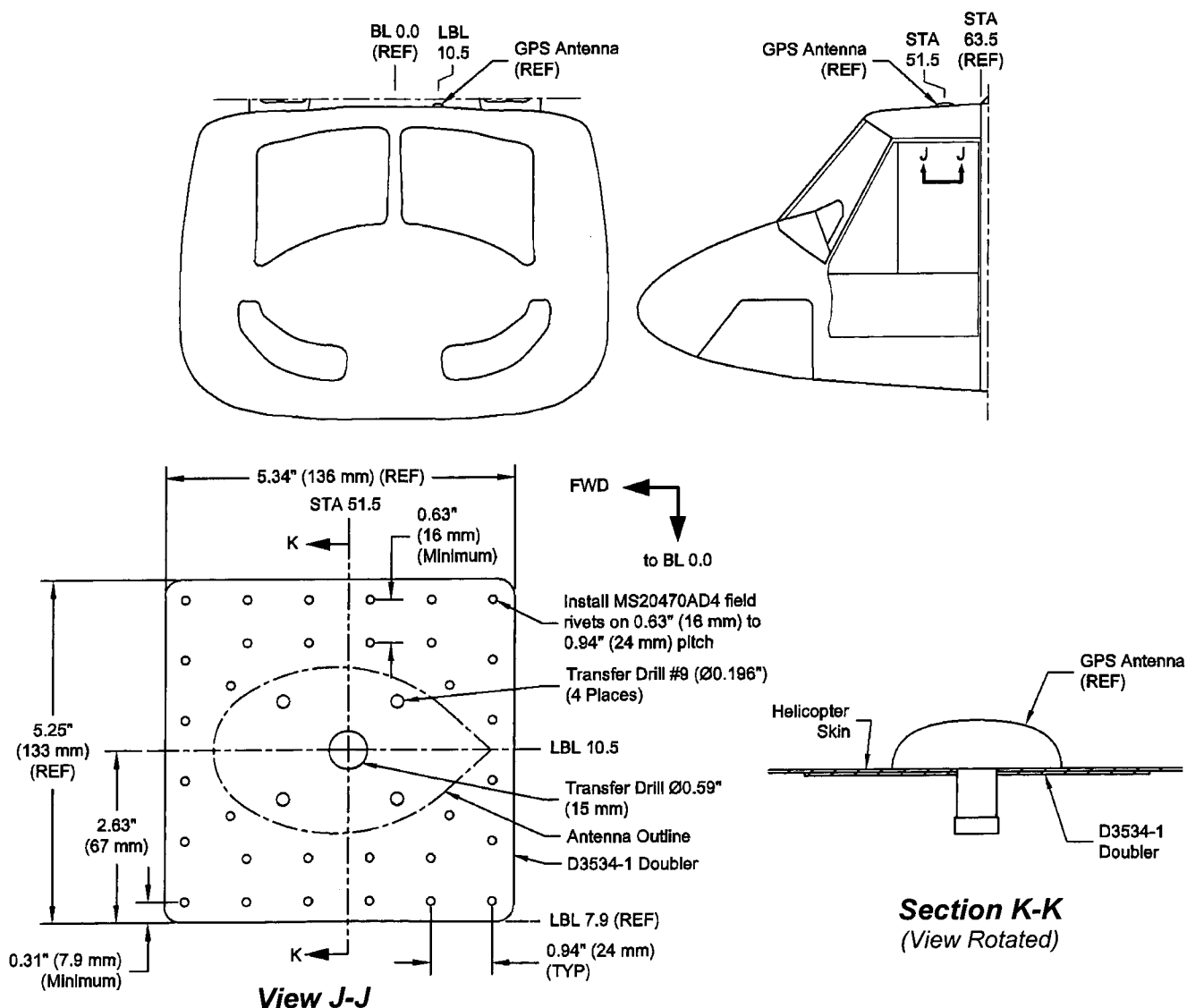


Figure 3.4.1 – D3534-1 Doubler Installation

- 3.4.2 Transfer drill existing rivet holes from the aircraft roof to the D3534-1 Doubler.
- 3.4.3 Drill #30 ($\varnothing 0.129$ ") rivet holes on a minimum 0.63" (16 mm) to maximum 0.94" (24 mm) pitch as shown in **Figure 3.4.1**. Deburr and touch up the holes per the Aircraft Maintenance Manual. Install MS20470AD4 field rivets (not included in this kit) in each hole.
- 3.4.4 Install the GPS antenna onto the D3534-1 Doubler at the location outlined in **Figure 3.4.1**, using the hardware supplied with the GPS antenna. Torque the nuts to 12-15 in-lbs (1.4-1.7 N-m).
- 3.4.5 Complete the installation of the antenna per the instructions provided with the GPS unit.

3.5 Wiring Installation

Note: Install wiring in accordance with the manufacturer's instructions and the notes provided in this section.

Note: All unshielded wires shall be M22759/16 (or equivalent); shielded wires shall be M27500-22TG2T14 (or equivalent); and coax shall be RG-400 (or equivalent).

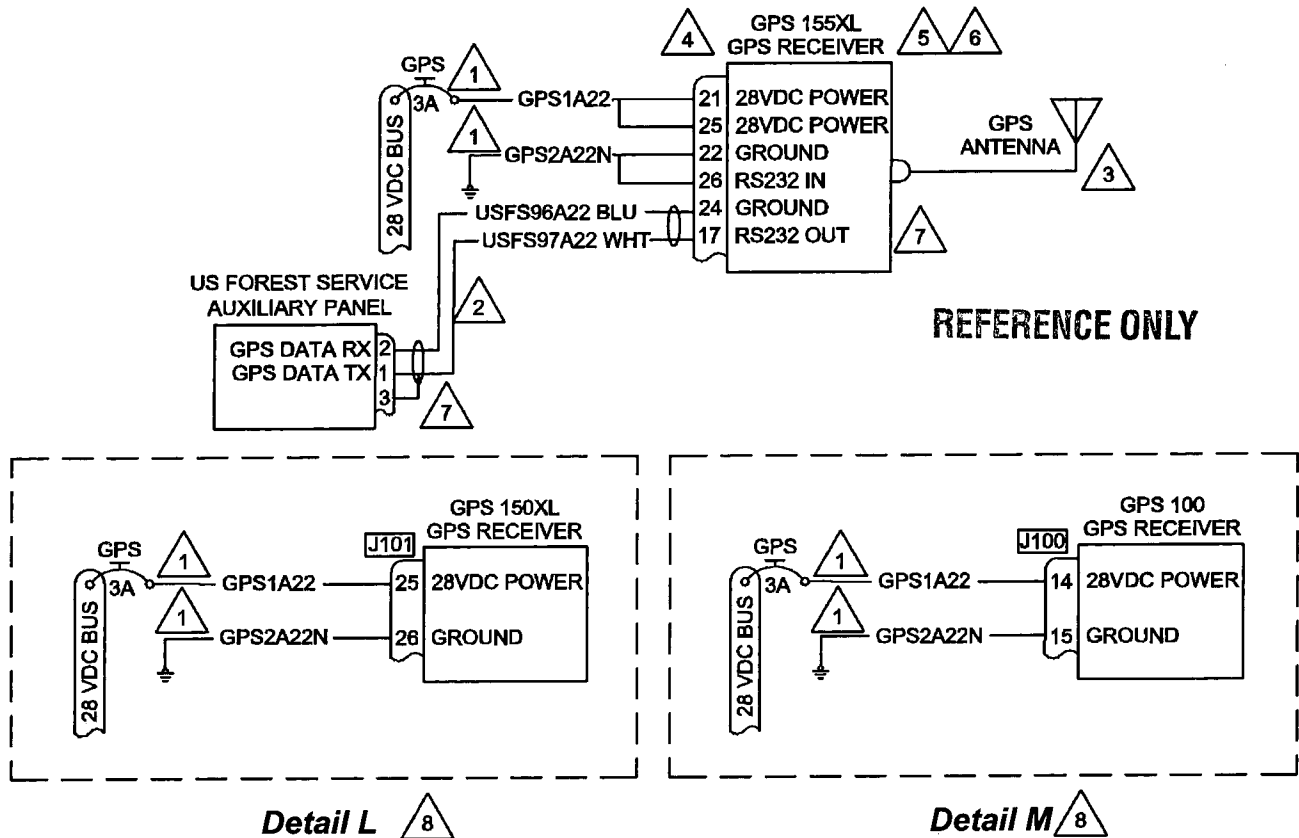
REFERENCE ONLY

Note: Wiring shall be marked per **Figure 3.5.1** in accordance with BHT-ELEC-SPM.

- 3.5.1 Use **Figure 3.5.1** as a reference when installing the GPS.
- 3.5.2 Route the coax from the antenna down the windshield center post along the existing wire bundle and secure in accordance with BHT-ELEC-SPM. Terminate coax at antenna.
- 3.5.3 Install a 3 Amp circuit breaker, P/N 7274-11-3 or equivalent, into the overhead circuit breaker panel (any open space may be used). Label the circuit breaker "GPS".
- 3.5.4 Connect the LINE side of the circuit breaker to 28VDC.
- 3.5.5 Route the power wire from the circuit breaker down the windshield center post along the existing wire bundle and secure in accordance with BHT-ELEC-SPM. Install a terminal lug, AMP 31890 or equivalent, on the power wire and connect to the LOAD side of the circuit breaker.
- 3.5.6 Install a terminal lug, AMP 36154 or equivalent, on the ground wire. Locate an existing ground stud or install a #10-32 ground screw in accordance with BHT-ELEC-SPM.
- 3.5.7 Route the wires and coax to the GPS unit ensuring that the wires and coax are protected against chaffing in accordance with BHT-ELEC-SPM.

Note: Optional installation procedure is to drill a 0.297" hole in the center of the windshield center post cover and install an MS35489-4 grommet and route the wires thru the grommet.

Note: If optional installation is used, the center post cover can be slotted to allow for ease of cover removal.
- 3.5.8 Connect the power and ground wires to the GPS receiver in accordance with the manufacturer's installation instructions.
- 3.5.9 Terminate the antenna coax at the GPS receiver.
- 3.5.10 Perform a function test of the GPS receiver in accordance with the manufacturer's instructions.
- 3.5.11 Test the GPS for Electro-Magnetic Interference (EMI) with and by other helicopter systems.



NOTES:

- 1 UNSHIELDED WIRES ARE M22759/16 (or equivalent)
- 2 SHIELDED WIRES ARE M27500-22TG2T14 (or equivalent)
- 3 COAX IS RG-400 (or equivalent)
- 4 HOOKUP SHOWN FOR GARMIN 155XL GPS RECEIVER
- 5 REFER TO DETAIL L FOR GARMIN 150XL HOOKUP
- 6 REFER TO DETAIL M FOR GARMIN GPS 100 HOOKUP
- 7 RS-232 OUTPUT TO USFS PANEL (If Installed)
- 8 REFER TO MANUFACTURERS INSTALLATION MANUAL FOR VERIFICATION OF PIN NUMBERS ON CONNECTORS

Figure 3.5.1 – Wiring Schematic

4.0 WEIGHT AND BALANCE

The following weight and balance information does not include the installation of any equipment in the D412-758-011/-013 GPS Receiver Gimbal Mount.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-758-011, Bottom Mounted GPS Receiver Gimbal Mount	1.40 lb 0.64 kg	8.0 in 0.20 m	11.2 in lb 0.13 kg m	24.0 in 0.61 m	33.6 in lb 0.39 kg m
D412-758-013, Top Mounted GPS Receiver Gimbal Mount	1.37 lb 0.62 kg	0 in 0 m	0 in lb 0 kg m	24.0 in 0.61 m	32.9 in lb 0.38 kg m

REFERENCE ONLY

5.0 PARTS LIST

QTY -011	QTY -013	Part Number	Description
X		D412-758-011	Bottom Mounted GPS Receiver Gimbal Mount
	X	D412-758-013	Top Mounted GPS Receiver Gimbal Mount
1		D3514-041	Bottom Mounted Gimbal Assembly
	1	D3514-043	Top Mounted Gimbal Assembly
1		*D3514-045	Bottom Mounted Housing Assembly
	1	*D3514-047	Top Mounted Housing Assembly
1	1	*D3522-1	Gasket
1		*D3523-1	Leg
	1	*D3523-3	Leg
1	1	*D3524-1	Lower Plate
1	1	*D3526-1	Rubber Seal
	1	*D3531-041	Bracket Assembly
2	2	*D3533-3	Set Screw
	1	*AN3-6A	Bolt
1		*AN3-10A	Bolt
3	2	*AN960JD10L	Washer
4	4	*MS24693-S29	Screw
	2	D2464-0066	Neoprene Seal
1	1	D3525-1	Placard
1		D3527-1	Support Arm
1		D3530-1	Base Plate
1		D3530-3	Mounting Plate
1	1	D3534-1	Doubler
	4	D3645-1	Washer
	4	AN525-10R7	Screw
3		AN526-632R7	Screw (or MS35206-229)
3		AN960JD6	Washer
2	4	AN960JD10	Washer
3		MS21042L06	Nut
1		MS21042L3	Nut
4	4	MS24693-S27	Screw
1		MS27039-1-09	Screw

Note: * denotes included in above assembly